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## ABSTRACT

Enlarging upon the scope and agenda of earlier diagnostic research, a study was conducted to examine (1) teacher responses to receiving diagnostic information about some of their students, (2) effects on student achievement of teachers receiving both diagnostic information and diagnostic training, (3) diagnostic classifications that emerged from student performance, and (4) differential teacher effectiveness and instructional practices. Subjects included 10 experienced fifth-grade classroom teachers. A reading diagnostic battery, developed for the previous studies, was individually administered as a pretest to 186 of the 192 students in the teachers' classrooms. An experimental group of five teachers, randomly assigned, received four hours of training in diagnostic reliability. Before and after the training, all 10 teachers diagnosed one of four randomly assigned simulated cases of reading difficulty at two different times. Teachers were also interviewed three times. Results showed that teachers responded positively to the receipt of specific diagnostic information about their students, seeing it as useful for thinking about and making changes in their instructional practices. Students for whom teachers received diagnostic information did not show significantly improved achievement over students for whom no information was provided. (Appendixes include the reading diagnostic battery and the interview questions.) (HOD)

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USING STUDENT DIAGNOSTIC INFORMATION  
TO ESTABLISH AN EMPIRICAL DATA BASE IN READING

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and Christian C. Wagner

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### Abstract

This study is the last in a programmatic series of research studies that began by investigating diagnostic reliability in reading, continued by developing a training program for improving diagnostic reliability, and concluded by investigating how diagnostic information might be used to improve student achievement in reading. Results show that 9 of the 10 teachers in the final study felt that receipt of diagnostic information sharpened their observations of student reading behavior and had potential for directing their thinking about instructional changes in their respective reading programs.

Students for whom teachers received diagnostic information did not show significantly improved achievement over students for whom no information was provided. Eighteen diagnostic classifications emerged from student performance on reading diagnostic tests; five classifications accounted for 60% of the students in the study. The characteristics of these five classifications together with their instructional implications are presented. Teachers were found to be differentially effective ( $p$  less than .05) for word recognition, oral reading, listening comprehension, and silent reading comprehension outcomes. Available interview and observation data were not sufficient for specifying instructional practices associated with varying levels of student achievement. The system documented by the study is a means of establishing an empirical basis for improving instruction and outcomes in reading.

USING STUDENT DIAGNOSTIC INFORMATION  
TO ESTABLISH AN EMPIRICAL DATA BASE  
IN READING

Annette B. Weinshank, Ruth M. Polin, and Christian C. Wagner<sup>1</sup>

In the teaching of reading, the absence of specific information linking student outcomes back to reliable diagnosis and instruction has presented a major obstacle to practitioners' learning systematically from their own experience. Improving student outcomes in reading requires that the teacher receive information that reliably classifies student performance into appropriate diagnostic categories. If the diagnostic categorizations are unreliable, it is not possible to determine, when outcomes are poor, whether instruction was inadequate for the student's problem or whether student performance was incorrectly diagnosed and good instruction was wasted on the wrong problem.

Unfortunately, diagnostic unreliability has been shown to be a pervasive problem in the field of reading. Only recently has it become possible to remedy the situation and to provide teachers with reliable diagnostic information. A series of studies on the diagnostic reliability of educational practitioners (Weinshank, 1982; Vinsonhaler, Weinshank, Wagner, & Polin, 1983; Weinshank & Vinsonhaler, 1983) showed that reading and learning disability specialists and classroom teachers did not agree with themselves or with one another in their diagnostic judgments about simulated cases of children with reading problems.

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The authors would like to acknowledge, with thanks, Lynn Wilhelm's contributions during the data-collection phase of this research.

A second series of studies (Vinsonhaler, Weinshank, Polin, & Wagner, 1983) showed that the reliability of diagnostic decision making could be improved dramatically through the use of a specific type of training program. Two important products of the training studies were (1) a reading diagnostic battery based primarily on a model of reading that focuses on performance in word recognition, oral reading, silent reading comprehension, and listening comprehension and (2) a computer program for generating reliable diagnoses given the data from student performance on the battery. Thus it became possible to provide teachers with reliable diagnostic information about their students' reading performances.

In a final set of studies (Wagner, 1982; Weinshank, Polin, & Wagner, 1985), one junior high school remedial reading teacher was provided with reliable diagnostic information about her students' reading performance. The studies were designed to test the methods needed to move from diagnostic reliability to issues of diagnostic validity: verifying linkages that exist between diagnosis, instruction, and student achievement. That is, given reliable diagnostic information, what instructional plans would be carried out and with what effect on students? These studies were limited in two ways: They involved only one teacher and they dealt with a restricted range of student abilities.

The study reported here enlarged the scope and agenda of the earlier work in order to answer four major research questions.

1. What do teachers report about the utility of receiving reliable diagnostic and performance information about their students?
2. What are the main effects on student achievement of whether or not a teacher receives (a) reliable diagnostic and performance information about a particular student and (b) diagnostic training that uses this information?

3. What are the diagnostic classifications that emerge from student performance on the test batteries?
4. Are teachers differentially effective for students in different diagnostic classifications? What teacher practices are associated with gains in achievement in particular diagnostic classifications?

#### Procedures

The study was conducted in an urban school district in mid-Michigan. All fifth-grade teachers in the district were invited to participate; those who volunteered were paid a small honorarium. Ten experienced classroom teachers ultimately joined the study. Eight of the 10 classes were heterogeneous in composition, with 19 to 28 students per class. The 9th class (with 6 students) was a remedial one; the 10th (with 7 students) an enriched one.

The reading diagnostic battery (Appendix A), developed for the previous studies, was individually administered as a pretest to 186 of the 192 students in the teachers' classrooms. Trained testers (interrater reliability = 92 to 99%) administered the battery and recorded (1) student responses to a set of interview questions and (2) student performance on four diagnostic reading behaviors: word recognition (correct, incorrect, and evidence of decoding strategies), oral reading (errors, rate, fluency, and inflection), silent reading comprehension (rate and percent of paragraph recalled), and listening comprehension (percent of paragraph recalled).

Teachers were interviewed three times. During the first interview (Appendix B), data was obtained about their teaching practices during the daily formal reading session (instructional practices and materials, classroom organization, criteria for grouping, nature of feedback, etc.). Teachers were then observed once during the formal reading period in order to verify whether the interview data did, in fact, reflect their classroom practices.

After the first interview, pretest information was returned to each teacher. The information consisted of individual scores and reading group mean scores for each of the four diagnostic reading behaviors. Tables 1 and 2 show the information that one teacher received about her students' performance on word recognition. The individual data were provided for two-thirds of the students in each class, randomly selected. Pretest information was given to the teachers together with a letter explaining how to read the data; no interpretation of data was made. The remaining one-third of the students served as an internal control group for the hypothesis that teachers' receipt of diagnostic information has an effect on student achievement. The data for these students were not given to the teacher.

Table 1  
Pretest Word Recognition Scores by Individuals--Teacher C

| Grade Level                                                       | Percent of words decoded |              |      |
|-------------------------------------------------------------------|--------------------------|--------------|------|
|                                                                   | 0 - 3                    | 3.1 - 6      |      |
| 8.5 - 9.0                                                         | 5C02 <sup>a</sup>        |              |      |
| 8.0 - 8.4                                                         | 5C04<br>5C09             | 5C08<br>5C14 |      |
| 7.5 - 7.9                                                         | 5C01                     |              |      |
| 7.0 - 7.4                                                         | 5C06                     | 5C11         | 5C12 |
| 6.5 - 6.9                                                         | 5C15                     |              |      |
| 6.0 - 6.4                                                         | 5C05                     |              |      |
| 5.5 - 5.9                                                         |                          |              |      |
| 5.0 - 5.4                                                         |                          |              |      |
| 4.5 - 4.9                                                         | 5C03                     |              |      |
| 4.0 - 4.4                                                         | 5C17                     |              |      |
| Control students not included: 5C04, 5C13, 5C19, 5C07, 5C16, 5C10 |                          |              |      |

<sup>a</sup>This is the code for a student's name.

Table 2  
Pretest Word Identification Scores by Reading Group--Teacher C

|                                    | <u>Weavers</u> (n=5)<br>(H/M) | <u>Gateways</u> (n=5)<br>(H/M) | <u>Banners</u> (n=7)<br>(H/M) |
|------------------------------------|-------------------------------|--------------------------------|-------------------------------|
| Word recognition and analysis      |                               |                                |                               |
| Slosson Oral Reading Test (SORT)   |                               |                                |                               |
| $\bar{x}$ grade equivalent & range | 6.7 (4.6-8.0)                 | 6.7 (4.3-8.1)                  | 7.7 (6.9-8.5)                 |
| $\bar{x}$ percent decoding & range | 5.0 (1 - 11)                  | 2.0 (0 - 5)                    | 4.0 (0 - 9)                   |

$\bar{x}$  = mean (average)

H/M = Houghton-Mifflin Reading Series

Weavers, Gateways, and Banners are basal texts for grades, 3, 4, and 5, respectively.

An experimental group of five teachers, randomly assigned, received four hours of training in diagnostic reliability. We thought that such training would enable them to better interpret their students' performance scores, ultimately resulting in changes in instruction and improved achievement. Before and after the training, all 10 teachers diagnosed one of four randomly assigned simulated cases of reading difficulty at two different times. Each case presented a commonly encountered problem of reading difficulty. Case material included completed test booklets, test scores, background information, and the like (Lee & Weinshank, 1978). The second diagnosis was done on an alternate version of the case used for the first diagnosis. The purpose of the diagnoses was to control for non-experimental sources of gain.

Teachers were interviewed a second time (Appendix C) to determine, among other things, (a) how they evaluated the pretest information they received and (b) what influences the simulated case diagnoses (and training program, where applicable) had on their interpretation of their students' pretest results.

Of the 186 students who had been pretested, 169 remained by the end of the school year. These students were given the diagnostic battery again as a posttest. Data for posttest and achievement were analyzed for both individuals and reading groups and the resulting information was returned to each teacher shortly after the 1983-84 school year ended. Scores for all the students in the class, including control students, were provided. Tables 3 and 4 exemplify the information returned to the teachers.

Table 3

## Word Recognition Achievement by Individuals--Teacher C

|           | Grade Level Changes | More than 15% | Changes in Percent of Decoding |       |                                     |              |       |
|-----------|---------------------|---------------|--------------------------------|-------|-------------------------------------|--------------|-------|
|           |                     |               | Decreases                      |       |                                     | Increases    |       |
|           |                     |               | 11-15%                         | 6-10% | 0-5%                                | 0-5%         | 6-10% |
| Increases | 1.6-2.0             |               |                                |       |                                     |              |       |
|           | 1.1-1.5             |               |                                |       | 5C05                                | 5C17         |       |
|           | .6-1.0              |               |                                |       | 5C11<br>5C13<br>5C18                | 5C01         |       |
|           | 0-.5                |               |                                | 5C07  | 5C09 5C14<br>5C10 5C16<br>5C12 5C19 | 5C03<br>5C08 |       |
| Decreases | .1-.5               |               |                                | 5C06  |                                     |              |       |
|           | .6-1.0              |               |                                |       |                                     |              |       |

Table 4

## Achievement by Reading Group--Teacher C

|                                            | <u>Weavers(n=5)</u><br>(H/M) | <u>Gateways(n=5)</u><br>(H/M) | <u>Banners(n=6)</u><br>(H/M) |
|--------------------------------------------|------------------------------|-------------------------------|------------------------------|
| Word recognition and analysis              |                              |                               |                              |
| Slosson Oral Reading Test (SORT)           |                              |                               |                              |
| $\bar{x}$ grade equivalent changes & range | +3 (0 to .5)                 | +8 (.2 to 1.3)                | +4 (-.2 to .6)               |
| $\bar{x}$ percent decoding changes & range | -2.5 (-8 to 3.5)             | -1.3 (-5 to +2)               | -2.8 (-7 to +2)              |
| -----                                      |                              |                               |                              |
| $\bar{x}$ = mean (average)                 |                              |                               |                              |
| H/M = Houghton-Nifflin Reading Series      |                              |                               |                              |

The final teacher interview (Appendix D) focused on whether the posttest and achievement scores for 1983-84 had any effect on the participating teachers' instructional decisions and actions for the 1984-85 school year.

Results

What do teachers report about the utility of receiving reliable diagnostic and performance information about their students?

After receiving the pretest diagnostic information, teachers were asked about its usefulness to them. During this second interview, 7 of the 10 teachers reported that the information was useful in sharpening their observations of student reading behavior in a variety of ways. The information (1) caused them to expect more from the students who scored well, (2) prompted them to recheck student group placement, (3) directed their attention to student shortcomings, and (4) verified their intuition about student group placement. The remaining three teachers felt the data were not applicable for use in their classrooms.

Teacher responses about the usefulness of the posttest and achievement information were recorded in the third interview, which was conducted at the beginning of the following school year. This time, 9 of the 10 teachers reported that the information had potential for directing their thinking about instructional changes in the reading program. However, they cited a number of limitations that would have to be corrected before the information could be put to direct use.

They wanted to (1) receive the information before the school year ended, (2) discuss their students' test results with the research staff and/or the other participating teachers, and (3) receive instructional strategies targeted to the diagnostic test results.

What are the main effects on student achievement of whether or not a teacher receives (a) reliable diagnostic and performance information about a particular student and (b) diagnostic training that uses this type of information?

There were no statistically significant differences in achievement for the four major diagnostic categories (word recognition, oral reading, silent reading comprehension, and listening comprehension) for experimental students whose diagnostic test results were returned to the teachers versus those for whom no diagnostic information was provided. It may be that teachers need to go through an entire year of receiving and using diagnostic information before they are able to incorporate use of it into their daily practice.

Similarly, there were no statistically significant differences in achievement for the students of teachers who received four hours of diagnostic training versus the students of the untrained teachers. Additionally, the training did not measurably improve the diagnostic reliability of the teachers on the simulated cases. While the four-hour training program was apparently too brief to alter teacher reliability, it was useful to the teachers in their

made was whether performance on one factor was above or below performance on the other.

Dividing a dimension into only two parts is probably too coarse a distinction. It may be the case that students separated by quarter of a year or even less require differing instruction. It is not known, a priori, how fine the performance distinctions should be. Choosing fewer distinctions rather than more can be justified on the grounds of practical as well as research constraints. As a practical matter, teachers cannot accommodate a differentiating scheme that results in an excessive number of instructional groups. As a research issue, making very fine distinctions among students would require a large sample to insure that there would be enough students falling into any one diagnostic category under study. Therefore, both the limited sample size of this study as well as the necessity that the diagnostic information be useful to the teachers dictated that fewer rather than more distinctions be used with each dimension.

Given the dimensions of interest, six diagnostic possibilities were formulated:

1. Word recognition below 4.5 grade equivalent (indicates problem) or above 4.5 grade equivalent (indicates no problem).
2. Oral reading below 4.5 grade equivalent (problem) or above 4.5 or above 4.5 grade equivalent (no problem).
3. Oral reading in relation to word recognition: word recognition grade equivalent is either above or below oral reading grade equivalent. Consider the following example.
  - a. Oral reading and word recognition performance are both at grade placement. In this case, better oral reading performance is not being limited by word recognition ability.
  - b. Oral reading is at grade placement but word recognition performance is below grade placement. This diagnostic classification represents a potential problem in oral reading for the student.

- c. Oral reading is below grade placement but word recognition is adequate. The teacher must look to other limiting causes for the lag in oral reading.
  - d. Oral reading and word recognition are both inadequate. Oral reading is limited, at the least, by word recognition deficits.
4. Silent reading comprehension is below 4.5 grade equivalent (problem) or above 4.5 grade equivalent (no problem).
  5. Silent reading comprehension in relation to word recognition: Word recognition is either above or below silent reading comprehension.
  6. Silent reading comprehension in relation to listening comprehension: Listening comprehension is either above or below silent reading comprehension. (Note that listening comprehension is not included as a separate dimension. Its primary relevance is as an indicator of silent reading comprehension potential.)

Given these six dimensions together with the two values per dimension, a total of 64 or  $2^6$  diagnostic classifications, were generated. All the students in the study fell into only 18 of the 64 classifications. Of these 18, 5 accounted for 60% of the students. No students fell into any of the remaining 46 classifications. Following are the 5 major classifications.

Classification 1: N = 16

Diagnosis:

word recognition: no problem  
 oral reading: problem  
 oral reading below word recognition  
 silent reading comprehension: problem  
 silent reading comprehension below word recognition  
 silent reading comprehension below listening comprehension

One could speculate that students in this classification have learned the mechanics of decoding but have not generalized those skills to extended text reading, either orally or silently. Given the relationship between silent reading comprehension and listening comprehension, these students would seem to have the potential for satisfactory reading performance.

Classification 2: N = 25

Diagnosis:

word recognition: no problem  
 oral reading: no problem  
 oral reading below word recognition

silent reading comprehension: problem  
 silent reading comprehension below word recognition  
 silent reading comprehension below listening comprehension

This classification is the same as Classification 1 except that oral reading is not a problem. These students may be reading orally on a superficially satisfactory basis but have not developed the monitoring and tracking strategies required for comprehension.

Classification 3: N = 24

Diagnosis:

word recognition: no problem  
 oral reading: no problem  
 oral reading below word recognition  
 silent reading comprehension: no problem  
 silent reading comprehension below word recognition  
 silent reading comprehension at or above listening comprehension

These students are adequate fifth-grade readers. Since both their oral reading and silent reading comprehension are below their word recognition performance, these students might be expected to perform orally and silently at a higher level. These students may need instruction that enlarges their vocabulary, conceptual base, and the like.

Classification 4: N = 19

Diagnosis:

word recognition: no problem  
 oral reading: no problem  
 oral reading at or above word recognition  
 silent reading comprehension: problem  
 silent reading comprehension below word recognition  
 silent reading comprehension below listening comprehension

These students' word recognition and oral reading performances are similar. Therefore, as word recognition improves, oral reading ability could be expected to rise correspondingly. Because silent reading comprehension is below word recognition and listening comprehension performance, other factors must be found to explain the silent reading comprehension problem.

Classification 5: N = 16

Diagnosis:

word recognition: no problem

oral reading: no problem

oral reading at or above word recognition

silent reading comprehension: no problem

silent reading comprehension below word recognition

silent reading comprehension at or above listening comprehension

These students appear to be performing up to their current limits.

Diagnostic classifications and grouping practices. The teachers' grouping practices were examined in relation to the diagnostic classifications generated for their students. Table 5 shows the profiles for the students in a classroom representative of the six who had two or more reading groups.

Table 5

Teachers' Groups in Relation to Student Diagnostic Classifications

| <u>Low Group</u> |    |     | <u>Mid Group</u> |    |     | <u>High Group</u> |    |     |
|------------------|----|-----|------------------|----|-----|-------------------|----|-----|
| WR               | OR | SRC | WR               | OR | SRC | WR                | OR | SRC |
| NP               | NP | NP  | NP               | NP | P   | NP                | NP | NP  |
| NP               | NP | NP  | NP               | NP | NP  | NP                | NP | NP  |
| NP               | P  | P   | NP               | NP | NP  | NP                | NP | NP  |
| NP               | NP | P   | NP               | NP | P   | NP                | NP | P   |
| NP               | NP | P   | P                | P  | P   | NP                | NP | NP  |
|                  |    |     |                  |    |     | NP                | NP | NP  |
|                  |    |     |                  |    |     | NP                | NP | P   |

WR = Word Recognition

OR = Oral Reading

SRC = Silent Reading Comprehension

P = Problem: below 4.5 grade level

NP = No Problem: at 4.5 or above

As can be seen, the diagnostic testing showed that most students had adequate pretest performance; the three groups were virtually indistinguishable from one another. To the extent that the groups differed noticeably, they did so on the comprehension dimension. Even here, not all students in the low group were deficient and not all students in the high group were proficient. Overall, only two students were deficient in more than one classification. The lack of clear-cut differences among reading groups was observed in all classes where there were two or more groups. This leads to questions about whether the differences that did exist warranted multiple groupings and the resulting use of different levels of the basal text.

Are teachers differentially effective for students in different diagnostic classifications? What teacher practices are associated with gains in achievement in particular diagnostic classifications?

Table 6 summarizes the performance and outcomes for word recognition, oral reading, silent reading comprehension, and listening comprehension for all the students in the study.

Table 6  
Mean Performance and Achievement Scores Across All Students

|                                                                                      | <u>Pretest (GE)</u> | <u>Posttest (GE)</u> | <u>Outcomes (in years)</u> |
|--------------------------------------------------------------------------------------|---------------------|----------------------|----------------------------|
| WR                                                                                   | 6.4 (2.4 - 9.4)     | 7.0 (2.6 - 9.6)      | .51 (-0.5 to 1.7)          |
| OR                                                                                   | 5.7 (1.0 - 9.0)     | 6.3 (1.0 - 9.0)      | .56 (-2.0 to 4.0)          |
| SRC                                                                                  | 4.3 (3.0 - 8.0)     | 4.7 (3.0 - 8.0)      | .38 (-2.0 to 4.0)          |
| LC                                                                                   | 4.9 (2.0 - 8.0)     | 5.2 (3.0 - 8.0)      | .28 (-3.0 to 4.0)          |
| GE = Grade Equivalent<br>WR = Word Recognition<br>SRC = Silent Reading Comprehension |                     |                      |                            |
| OR = Oral Reading<br>LC = Listening Comprehension                                    |                     |                      |                            |

As the table shows, these students entered fifth grade, on the average, above grade level in word recognition and oral reading, at grade level in listening comprehension, and below grade level in silent reading comprehension. While the mean gains in word recognition and oral reading were only half a year for one year in school, the students still entered sixth grade, on the average, with those skills intact. However, for students at the lower reaches of the class range, this gain would not be sufficient to bring their performance up to grade level. Even for students in the middle of the range, silent reading comprehension and listening scores are inadequate.

Outcome results based on the pretest classifications indicate that students in two of the classifications had significantly different achievement depending on the teacher they had.

- a. In Diagnostic Classification 2 ( $N = 25$ ) there was a significant teacher effect ( $p < .05$ ) for word recognition outcomes. Across the seven teachers who had students from that classification mean student gain was .60 years with a range of .18 to 1.17 years. For this same entering classification there was an additional teacher effect approaching significance ( $p < .10$ ) for silent reading comprehension outcomes as well. Mean gain was .71 years; the range was 0 to 1.67 years.
- b. In Diagnostic Classification 3 ( $N = 24$ ) there was a statistically significant teacher effect ( $p < .05$ ) for listening comprehension outcomes. The mean gain was .68 with a range across the seven teachers who had students from this classification of 0 to 2.0 years.

Thus the teachers in this study were differentially effective for students with identical entering diagnostic classifications who could have been expected to show comparable achievement by year's end.

Differential effectiveness for whole-class outcomes for all 10 teachers was also documented for word recognition ( $p < .05$ ) and silent reading comprehension ( $p < .01$ ). Mean gain for word recognition was .49 years; the range was .22 to .80 years. Mean gain for silent reading comprehension was .37; the

range was  $-.16$  to  $+1.25$  years. Thus, regardless of the diagnostic characteristics of individual students, some teachers were more effective than others in improving student achievement on certain reading skills.

In sum, the analysis procedure differentiated among students and teachers. It allowed for the reliable diagnostic classification of students based on their performance on specified reading tasks and for tracking precisely achievement within those classifications. The procedure also was capable of documenting differential teacher effects on (a) achievement of students grouped within the same pretest classification and (b) achievement across students regardless of their individual diagnostic classifications.

An effort was made to see whether special practices could be identified for those teachers whose students made above average gains in achievement. The accuracy of the data from the first interview was verified via classroom observations made by the research staff. Within the constraints of observing each teacher once, researchers concluded that an overall match existed between interview and observational data. The interview and observational data collected were insufficient as a basis for differentiating among the teachers. The overall similarity of responses during the first interview masked any differences that undoubtedly existed among the various classrooms. However, the analysis of achievement data did permit us to show that specific teacher effects on achievement can be documented and that teachers can be rank ordered from highest to lowest according to the level of their students' achievement in specific reading skill areas. Thus the analytic procedures provide a basis upon which to select teachers for further observation and interview.

Below are the responses to 10 questions about classroom practice asked during the first interview. They point to the presence of a small, shared,

repertoire of instructional practices in reading promoted, perhaps, by the district having recently imposed a uniform set of district-wide basal materials together with their associated objectives.

1. Texts and materials used. Nine of the 10 teachers used the Houghton-Mifflin basal series mandated by the school district for grades 1-5. The accelerated class used the basal mandated for grades 6-8. Most teachers made periodic use of supplementary materials, such as library books and commercially published skills exercises.
2. Students requiring the most instructional time. Teachers perceived themselves as giving more time and attention to low students than to other student groups.
3. Feedback to students. The most commonly mentioned methods of feedback were written and verbal comments and sharing and displaying good work.
4. Types of motivational activities. Most of the teachers reported the use of verbal praise, tangible rewards, and communicating their personal enthusiasm about reading.
5. Overall choreography of the reading lesson. Seven of the teachers reported that they grouped their students. They either rotated the groups through a fixed series of daily activities or through a series of weekly activities, with each activity assigned to a different day. Whole-group instruction was also used in conjunction with the grouping.
6. Criteria for grouping. Most of the teachers reported using some combination of the following criteria to determine group membership: students' placement at the end of the preceding year, basal placement test results, teacher judgment, reading teacher recommendations, and standardized test scores.

Teachers were asked to describe how they typically conducted instruction in oral reading, word recognition, comprehension skills, and listening skills.

7. Oral reading. Most teachers dealt with miscues by providing the student with the correct word; a few directed students to reread or to attempt to decode the word. Problems with inflection and fluency were typically addressed by teacher modeling.
8. Word recognition skills. The three instructional strategies mentioned most often were using context to determine an unknown word, using the basal skill exercises, and teaching decoding via direct instruction.
9. Comprehension skills. The most commonly used strategies were questioning and group discussion.

10. Listening skills. Three types of favored activities were use of commercially prepared tapes and kits, practice in listening to directions, and use of teacher-designed games.

### Student Interview Results

Student responses to the interview questions posed on the pre- and posttest diagnostic batteries were analyzed to see if they could provide additional predictive data about student diagnostic classifications. A number of items were found to be significantly correlated with performance ( $p < .01$ ) on one or more of the four diagnostic reading behaviors listed below. However, the usefulness of student interview data in contributing to the quality of diagnostic classification is uncertain.

Student interview responses which correlated with test performance (\* = significant both for pre and posttests, WR = Word Recognition, OR = Oral Reading, SRC = Silent Reading Comprehension, and LC = Listening Comprehension):

Performance (in specified diagnostic categories) was positively correlated with:

- \* a) fewer retentions (WR, OR, LC);
- b) understanding science texts (WR);
- \* c) using the dictionary for word meanings (WR);
- \* d) characterizing good oral reading by inflection (LC);
- e) understanding the English text (WR);
- f) "figuring out" meaning of unknown word (SRC, LC); and
- g) having a plan for decoding words (LC).

Performance (in specified diagnostic categories) was negatively correlated with:

- \* a) seeing oneself as being a good reader (WR, OR, LC);
- \* b) not wearing prescribed glasses (WR, OR);
- c) not reporting any strategy for decoding (LC);
- \* d) not being able to characterize good oral reading (LC); and
- e) frequent absence in second grade (LC).

### Summary and Discussion

This study was the last in a programmatic series of research studies which began by investigating diagnostic reliability in reading, continued by developing a training program for improving reliability, and concluded by investigating how diagnostic information could be used to improve student achievement in reading. We examined (1) teacher responses to receiving diagnostic information about some of their students; (2) effects on student achievement of teachers receiving both diagnostic information and diagnostic training; (3) diagnostic classifications that emerged from student performance; and (4) differential teacher effectiveness and instructional practices.

The fifth-grade teachers responded positively to the receipt of specific diagnostic information about their students, seeing in the information potential for thinking about their own practice and for making changes in their reading instruction.

There were no apparent effects on student achievement either for teachers receiving diagnostic information or for teachers receiving diagnostic training in addition to diagnostic information.

Eighteen diagnostic classifications accounted for the test performance of all 169 students in the study; five classifications accounted for 60% of the students. The characteristics of the classifications together with their instructional implications were presented. Teachers' grouping practices did not correspond to the diagnostic characteristics we found for their students.

Teachers were found to be differentially effective for students in three of the five major diagnostic classifications. In two diagnostic classifications, teacher effects for the entire class were also documented. Available interview and observational data were not sufficient for specifying instructional practices associated with varying levels of achievement.

The system for capturing and interpreting reading-related data documented by the study has importance for different educational communities. For educational researchers, the system provides a means of establishing, over time, an empirical basis for improving instruction and achievement in reading by (1) identifying instructionally meaningful diagnostic classifications based on student performance and (2) identifying teachers who appear to be especially effective in promoting student achievement in specified reading areas.

For participating teachers, the system makes more accessible already existing student information. Individual teachers can use diagnostic and performance information to evaluate specific instructional decisions and strategies in the light of student achievement.

The project findings suggest that developing this empirical body of information will require a large sample of students and teachers in order to establish the most common diagnostic classifications for particular grade levels together with the expected outcomes for students in those classifications. Further, teachers shown to be effective in promoting student achievement in specified areas at the various grade levels must be interviewed and observed intensively so that those instructional practices associated with higher levels of student achievement can be made explicit. A data base that verifies instructional techniques of choice for students in specific diagnostic classifications would serve to enlarge teachers' repertoires of relevant instructional activities, act as a clearinghouse for disseminating existing exemplary practice, and provide a common basis for discussion and exchange among teachers and between teachers and the research community.

The strength of the system described in this study is that it, too, learns from experience. The data base that allows teachers to learn from

their own and their colleagues' experience would itself be altered by the continuous addition of teacher actions and their consequences. It is a system that would ultimately prescribe treatments of choice, but that would simultaneously, because of its grounding in the observation of practice, be responsive to variations of practice and associated outcomes. It is a system capable of both learning and teaching.

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**Appendix A:**  
**Reading Diagnostic Battery**

Name of school: \_\_\_\_\_

Name of teacher: \_\_\_\_\_

Name of student: \_\_\_\_\_

Name of tester: \_\_\_\_\_

THIS SHEET MUST BE REMOVED BEFORE DATA IS PROCESSED!

Instructions to Test Administrator for Total Test

1. Please record today's date and the time:  
Date: \_\_\_\_\_ Time: \_\_\_\_\_
2. When the cover sheet identifying the school, teacher, student and tester names is destroyed, the codes for this information should be inserted here.  
School code: \_\_\_\_\_  
Teacher code: \_\_\_\_\_  
Student code: \_\_\_\_\_  
Tester code: \_\_\_\_\_
3. The following materials should be present for the testing session:
  - a. The 'Test Materials Notebook'
  - b. A stop watch for timing various parts of the testing session.
  - c. A wristwatch or clock.
  - d. One sheet of opaque 8.5 X 11 inch paper.
  - e. Two # 2 2/4 pencils with eraser.
4. DO NOT GIVE THE STUDENT HIS/HER TEST MATERIALS AT THIS TIME.

Introduction to Student

After greeting the student and introducing yourself, orient the student to the session. Be sure to cover the following points:

1. that all the students in this class as well as in a number of other classes are being tested;
2. that the purpose of the testing is to collect information on how students read;
3. that we hope the information will be useful to teachers as they help students read better;
4. that the session will last about half an hour. During most of that time the student will be reading either out loud or to him/herself;
5. that during the session you will be jotting things down and using the stopwatch from time to time;
6. let the student ask you any questions s/he might have.

Introduction to Student

Standard Interview Form

1. Please record the clock time. Time: \_\_\_\_\_  
Read the following to the student:

"I'M GOING TO ASK YOU SOME QUESTIONS. YOUR ANSWERS WILL HELP US BETTER UNDERSTAND HOW STUDENTS READ.

Unless otherwise directed, check only one answer per question. If the student doesn't respond, prompt with the listed options.

FOR PRETEST, ASK QUESTIONS IN SECTIONS 2 AND 4. IF THIS IS NOT AN INITIAL TESTING, ASK QUESTIONS IN SECTIONS 3 AND 4.

2. FOR PRETEST SESSION

- a. What kind of reader do you think you are?  
 \_\_\_ very good (1)  
 \_\_\_ good (O.K.) (2)  
 \_\_\_ not very good (3)  
 \_\_\_ bad (4)  
 \_\_\_ no response or didn't know (-1)  
 \_\_\_ other (-2) \_\_\_\_\_
- b. (Ask only if student indicates "not very good" or "bad".)  
 What grade level were you in when you first noticed that reading was a problem?  
 \_\_\_ 1st grade (1)  
 \_\_\_ 2nd grade (2)  
 \_\_\_ 3rd grade (3)  
 \_\_\_ 4th grade (4)  
 \_\_\_ 5th grade (5)  
 \_\_\_ no response or didn't know (-1)  
 \_\_\_ other (-2) \_\_\_\_\_
- c. Have you been absent from school a lot in past years?  
 \_\_\_ yes (1)  
 \_\_\_ no (2)  
 \_\_\_ some grades (3)  
 \_\_\_ no response or didn't know (-1)  
 \_\_\_ other (-2) \_\_\_\_\_
- d. (Ask only if student indicated absences.)  
 In what grade(s) were you absent a lot? (check all that apply)  
 \_\_\_ 1st grade (yes=1 no=0)  
 \_\_\_ 2nd grade (yes=1 no=0)  
 \_\_\_ 3rd grade (yes=1 no=0)  
 \_\_\_ 4th grade (yes=1 no=0)  
 \_\_\_ 5th grade (yes=1 no=0)

Standard Interview Form

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- e. Have you ever repeated a grade?  
☐ yes (1)  
☐ no (2)  
☐ no response or didn't know (-1)  
☐ other (-2) \_\_\_\_\_

GO TO SECTION 4 NOW!

### 3. FOR POSTTEST SESSIONS.

- a. How often have you been absent from school this year?  
☐ less than 1 week (1)  
☐ 1 week - 3 weeks (2)  
☐ more than 3 weeks (3)  
☐ no response or didn't know (-1)  
☐ other (-2) \_\_\_\_\_
- b. How would you say your reading now compares with your reading at the beginning of the year?  
☐ better (1)  
☐ the same (2)  
☐ worse (3)  
☐ no response or didn't know (-1)  
☐ other (-2) \_\_\_\_\_

GO ON TO SECTION 4 NOW!

### 4. COMPLETE THE QUESTIONS IN THIS SECTION FOR ALL ADMINISTRATIONS OF THE TEST BATTERY.

- a. When you read your school books, do you know most of the words right away?  
☐ yes (1)  
☐ no (2)  
☐ no response or didn't know (-1)  
☐ other (-2) \_\_\_\_\_
- b. What do you do when you come to a word you can't read right away? (check all that apply)  
☐ skip it (yes=1 no=0)  
☐ ask for help (yes=1 no=0)  
☐ use sound symbol association (e.g., sound it out) (yes=1 no=0)  
☐ use unspecified strategy (e.g., figure it out) (yes=1 no=0)  
☐ no response or didn't know (yes=1 no=0)  
☐ other (yes=1 no=0) \_\_\_\_\_

- c. When you listen to people read out loud, how can you tell if they're doing a good job? (check all that apply)  
☐ accurate (e.g., they know all the words) (yes=1 no=0)  
☐ inflection (e.g., they read smoothly) (yes=1 no=0)  
☐ speed (e.g., they read fast) (yes=1 no=0)  
☐ no response or didn't know (yes=1 no=0)  
☐ other (yes=1 no=0) \_\_\_\_\_
- d. Do you have any trouble seeing things clearly?  
☐ yes (1)  
☐ no (2)  
☐ no response or didn't know (-1)  
☐ other (-2) \_\_\_\_\_
- e. Do you have glasses for reading?  
☐ yes (1)  
☐ no (2)  
☐ no response or didn't know (-1)  
☐ other (-2) \_\_\_\_\_
- f. (Ask only if the student has glasses.)  
 Do you wear the glasses when you read?  
☐ yes (1)  
☐ sometimes (2)  
☐ no (3)  
☐ no response or didn't know (-1)  
☐ other (-2) \_\_\_\_\_
- g. Do your eyes bother you after you've been reading for 15 or 20 minutes?  
☐ yes (1)  
☐ sometimes (2)  
☐ no (3)  
☐ no response or didn't know (-1)  
☐ other (-2) \_\_\_\_\_
- h. Do you have trouble hearing your teachers while you're trying to listen to them?  
☐ yes (1)  
☐ sometimes (2)  
☐ no (3)  
☐ no response or didn't know (-1)  
☐ other (-2) \_\_\_\_\_

Do you have any trouble understanding what you read in your:

- i. science books?  
☐ yes (1)  
☐ sometimes (2)  
☐ no (3)  
☐ no response or didn't know (-1)  
☐ other (-2) \_\_\_\_\_

- j. English books?  
 \_\_ yes (1)  
 \_\_ sometimes (2)  
 \_\_ no (3)  
 \_\_ no response or didn't know (-1)  
 \_\_ other (-2) \_\_\_\_\_
- k. social studies books?  
 \_\_ yes (1)  
 \_\_ sometimes (2)  
 \_\_ no (3)  
 \_\_ no response or didn't know (-1)  
 \_\_ other (-2) \_\_\_\_\_
- l. math books?  
 \_\_ yes (1)  
 \_\_ sometimes (2)  
 \_\_ no (3)  
 \_\_ no response or didn't know (-1)  
 \_\_ other (-2) \_\_\_\_\_
- m. If your teacher asked you to sound out a word, how would you do it? (check all that apply)  
 \_\_ divide it up (syllabicate) (yes=1 no=0)  
 \_\_ sound it out (yes=1 no=0)  
 \_\_ put it all together (blend/adjust) (yes=1 no=0)  
 \_\_ other (yes=1 no=0)  
 \_\_ no response or didn't know (yes=1 no=0)
- n. What do you do when you come to a word you can read but don't know its meaning? (check all that apply)  
 \_\_ skip it (yes=1 no=0)  
 \_\_ ask someone (yes=1 no=0)  
 \_\_ look in the dictionary (yes=1 no=0)  
 \_\_ try to figure it out (yes=1 no=0)  
 \_\_ no response or didn't know (yes=1 no=0)  
 \_\_ other (yes=1 no=0)

Standard Interview Form

Word Recognition Measure

1. Please record the clock time. Time: \_\_\_\_\_
2. Give the student his/her "Test Materials Booklet". Turn to the SORT.
3. Read the following directions to the child:  
 "HERE ARE SOME LISTS OF WORDS. I'LL ASK YOU TO READ SOME OF THESE LISTS. IF YOU DON'T KNOW A WORD RIGHT AWAY, TRY AND SOUND IT OUT. WE'RE GOING TO START WITH THE VERY FIRST LIST.\*"
4. For each word, record student performance as follows:
  - a. If the student reads the word correctly with no hesitation, check the 'Correct' column.
  - b. If the student does not correctly call the word within a slow count of five, check the 'Incorrect' column. An incorrectly accented word is considered incorrect. If the student does not respond, check the 'Incorrect' column.
  - c. If you see or hear a student attempting to decode a word, check the 'Mediated' column irrespective of whether the word is pronounced correctly or incorrectly.
  - d. After a slow count of five, ask the student to continue with the next word.
5. Let the student proceed through the lists in order as long as six or more words are marked as 'Correct'.

REMEMBER: THE CRITERION FOR CONTINUING IS 6 OR MORE WORDS READ CORRECTLY - INSTANT OR MEDIATED.

Word Recognition Measure

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| Word       | Correct | Incorrect | Mediated |
|------------|---------|-----------|----------|
| 1. jump    | —       | —         | —        |
| 2. want    | —       | —         | —        |
| 3. look    | —       | —         | —        |
| 4. play    | —       | —         | —        |
| 5. come    | —       | —         | —        |
| 6. is      | —       | —         | —        |
| 7. can     | —       | —         | —        |
| 8. one     | —       | —         | —        |
| 9. see     | —       | —         | —        |
| 10. ball   | —       | —         | —        |
| 11. little | —       | —         | —        |
| 12. three  | —       | —         | —        |
| 13. baby   | —       | —         | —        |
| 14. run    | —       | —         | —        |
| 15. down   | —       | —         | —        |
| 16. mother | —       | —         | —        |
| 17. here   | —       | —         | —        |
| 18. up     | —       | —         | —        |
| 19. help   | —       | —         | —        |
| 20. same   | —       | —         | —        |
| TOTALS     | —       | —         | —        |

| Word        | Correct | Incorrect | Mediated |
|-------------|---------|-----------|----------|
| 21. very    | —       | —         | —        |
| 22. under   | —       | —         | —        |
| 23. hill    | —       | —         | —        |
| 24. road    | —       | —         | —        |
| 25. dark    | —       | —         | —        |
| 26. horse   | —       | —         | —        |
| 27. case    | —       | —         | —        |
| 28. puppy   | —       | —         | —        |
| 29. was     | —       | —         | —        |
| 30. bump    | —       | —         | —        |
| 31. with    | —       | —         | —        |
| 32. ride    | —       | —         | —        |
| 33. along   | —       | —         | —        |
| 34. friends | —       | —         | —        |
| 35. first   | —       | —         | —        |
| 36. food    | —       | —         | —        |
| 37. wish    | —       | —         | —        |
| 38. what    | —       | —         | —        |
| 39. basket  | —       | —         | —        |
| 40. live    | —       | —         | —        |
| TOTALS      | —       | —         | —        |

| Word          | Correct | Incorrect | Mediated |
|---------------|---------|-----------|----------|
| 41. better    | —       | —         | —        |
| 42. hide      | —       | —         | —        |
| 43. large     | —       | —         | —        |
| 44. field     | —       | —         | —        |
| 45. around    | —       | —         | —        |
| 46. suddenly  | —       | —         | —        |
| 47. forest    | —       | —         | —        |
| 48. river     | —       | —         | —        |
| 49. sheep     | —       | —         | —        |
| 50. station   | —       | —         | —        |
| 51. breakfast | —       | —         | —        |
| 52. across    | —       | —         | —        |
| 53. heavy     | —       | —         | —        |
| 54. lunch     | —       | —         | —        |
| 55. happen    | —       | —         | —        |
| 56. grass     | —       | —         | —        |
| 57. gas       | —       | —         | —        |
| 58. farmer    | —       | —         | —        |
| 59. stars     | —       | —         | —        |
| 60. hope      | —       | —         | —        |
| TOTALS        | —       | —         | —        |

Word Recognition Measure

| Word           | Correct | Incorrect | Mediated |
|----------------|---------|-----------|----------|
| 61. hunger     | —       | —         | —        |
| 62. evening    | —       | —         | —        |
| 63. beach      | —       | —         | —        |
| 64. cause      | —       | —         | —        |
| 65. grove      | —       | —         | —        |
| 66. desire     | —       | —         | —        |
| 67. perform    | —       | —         | —        |
| 68. destroy    | —       | —         | —        |
| 69. delicious  | —       | —         | —        |
| 70. understood | —       | —         | —        |
| 71. safe       | —       | —         | —        |
| 72. against    | —       | —         | —        |
| 73. tired      | —       | —         | —        |
| 74. ocean      | —       | —         | —        |
| 75. deep       | —       | —         | —        |
| 76. stream     | —       | —         | —        |
| 77. empty      | —       | —         | —        |
| 78. wash       | —       | —         | —        |
| 79. stone      | —       | —         | —        |
| 80. reward     | —       | —         | —        |
| TOTALS         | —       | —         | —        |

Word Recognition Measure

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| Word           | Correct | Incorrect | Mediated |
|----------------|---------|-----------|----------|
| 81. claimed    | —       | —         | —        |
| 82. forehead   | —       | —         | —        |
| 83. serious    | —       | —         | —        |
| 84. speechless | —       | —         | —        |
| 85. distant    | —       | —         | —        |
| 86. faintly    | —       | —         | —        |
| 87. anger      | —       | —         | —        |
| 88. courage    | —       | —         | —        |
| 89. slender    | —       | —         | —        |
| 90. common     | —       | —         | —        |
| 91. harness    | —       | —         | —        |
| 92. flame      | —       | —         | —        |
| 93. develop    | —       | —         | —        |
| 94. recent     | —       | —         | —        |
| 95. price      | —       | —         | —        |
| 96. future     | —       | —         | —        |
| 97. appearance | —       | —         | —        |
| 98. promptly   | —       | —         | —        |
| 99. region     | —       | —         | —        |
| 100. silence   | —       | —         | —        |
| TOTALS         | —       | —         | —        |

Word Recognition Measure

| Word            | Correct | Incorrect | Mediated |
|-----------------|---------|-----------|----------|
| 101. dignity    | —       | —         | —        |
| 102. generally  | —       | —         | —        |
| 103. gracious   | —       | —         | —        |
| 104. applause   | —       | —         | —        |
| 105. define     | —       | —         | —        |
| 106. cushion    | —       | —         | —        |
| 107. jungle     | —       | —         | —        |
| 108. base       | —       | —         | —        |
| 109. profitable | —       | —         | —        |
| 110. tailor     | —       | —         | —        |
| 111. fragrant   | —       | —         | —        |
| 112. obedient   | —       | —         | —        |
| 113. carriage   | —       | —         | —        |
| 114. presence   | —       | —         | —        |
| 115. terrace    | —       | —         | —        |
| 116. interfere  | —       | —         | —        |
| 117. addition   | —       | —         | —        |
| 118. merchant   | —       | —         | —        |
| 119. custom     | —       | —         | —        |
| 120. extended   | —       | —         | —        |
| TOTALS          | —       | —         | —        |

Word Recognition Measure

## Outcome Studies in Reading

14

| Word              | Correct | Incorrect | Mediated |
|-------------------|---------|-----------|----------|
| 121. tremendous   | —       | —         | —        |
| 122. dungeon      | —       | —         | —        |
| 123. customary    | —       | —         | —        |
| 124. abundant     | —       | —         | —        |
| 125. malicious    | —       | —         | —        |
| 126. imaginary    | —       | —         | —        |
| 127. excellence   | —       | —         | —        |
| 128. consequently | —       | —         | —        |
| 129. installed    | —       | —         | —        |
| 130. responsible  | —       | —         | —        |
| 131. yearning     | —       | —         | —        |
| 132. liquid       | —       | —         | —        |
| 133. medicine     | —       | —         | —        |
| 134. spectacular  | —       | —         | —        |
| 135. rebellion    | —       | —         | —        |
| 136. compliments  | —       | —         | —        |
| 137. infected     | —       | —         | —        |
| 138. inventory    | —       | —         | —        |
| 139. importance   | —       | —         | —        |
| 140. detained     | —       | —         | —        |
| TOTALS            | —       | —         | —        |

Word Recognition Measure

## Outcome Studies in Reading

15

| Word               | Correct | Incorrect | Mediated |
|--------------------|---------|-----------|----------|
| 141. reminiscence  | —       | —         | —        |
| 142. architecture  | —       | —         | —        |
| 143. environent    | —       | —         | —        |
| 144. counterfeit   | —       | —         | —        |
| 145. pensive       | —       | —         | —        |
| 146. tremor        | —       | —         | —        |
| 147. intricate     | —       | —         | —        |
| 148. administer    | —       | —         | —        |
| 149. continuously  | —       | —         | —        |
| 150. attentively   | —       | —         | —        |
| 151. industrious   | —       | —         | —        |
| 152. contemporary  | —       | —         | —        |
| 153. approximate   | —       | —         | —        |
| 154. standardize   | —       | —         | —        |
| 155. complexion    | —       | —         | —        |
| 156. exhausted     | —       | —         | —        |
| 157. malignant     | —       | —         | —        |
| 158. compassionate | —       | —         | —        |
| 159. crisis        | —       | —         | —        |
| 160. society       | —       | —         | —        |
| TOTALS             | —       | —         | —        |

Word Recognition Measure

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| Word              | Correct | Incorrect | Mediated |
|-------------------|---------|-----------|----------|
| 161. nucleus      | —       | —         | —        |
| 162. proportional | —       | —         | —        |
| 163. articulate   | —       | —         | —        |
| 164. remarkably   | —       | —         | —        |
| 165. nonchalant   | —       | —         | —        |
| 166. memorandum   | —       | —         | —        |
| 167. deprecate    | —       | —         | —        |
| 168. contrasting  | —       | —         | —        |
| 169. whimsical    | —       | —         | —        |
| 170. evident      | —       | —         | —        |
| 171. prairies     | —       | —         | —        |
| 172. twilight     | —       | —         | —        |
| 173. intangible   | —       | —         | —        |
| 174. supplement   | —       | —         | —        |
| 175. formulated   | —       | —         | —        |
| 176. exuberant    | —       | —         | —        |
| 177. antique      | —       | —         | —        |
| 178. inducement   | —       | —         | —        |
| 179. irrelevance  | —       | —         | —        |
| 180. grotesque    | —       | —         | —        |
| TOTALS            | —       | —         | —        |

Word Recognition Measure

| Word              | Correct | Incorrect | Mediated |
|-------------------|---------|-----------|----------|
| 181. sojourn      | —       | —         | —        |
| 182. affable      | —       | —         | —        |
| 183. auspicious   | —       | —         | —        |
| 184. emaciated    | —       | —         | —        |
| 185. futility     | —       | —         | —        |
| 186. primordial   | —       | —         | —        |
| 187. inadequacy   | —       | —         | —        |
| 188. chastisement | —       | —         | —        |
| 189. envisage     | —       | —         | —        |
| 190. pandemonium  | —       | —         | —        |
| 191. panorama     | —       | —         | —        |
| 192. compressible | —       | —         | —        |
| 193. gustatory    | —       | —         | —        |
| 194. traverse     | —       | —         | —        |
| 195. simultaneous | —       | —         | —        |
| 196. excruciating | —       | —         | —        |
| 197. contraband   | —       | —         | —        |
| 198. decipher     | —       | —         | —        |
| 199. scrupulous   | —       | —         | —        |
| 200. facsimile    | —       | —         | —        |
| TOTALS            | —       | —         | —        |

Word Recognition Measure

Gray Oral Reading Test

1. Please record the clock time. Time: \_\_\_\_\_
2. Now turn to the Gray Oral Reading Test.
3. Read the following instructions to the student:  
 'YOU ARE GOING TO BE READING SOME PARAGRAPHS ALOUD. YOU'LL READ THEM ONE AT A TIME. THEY GET HARDER AS YOU GO ALONG AND YOU CAN EXPECT TO MAKE MISTAKES. I WILL BE TIMING YOU BUT PLEASE DON'T READ FASTER BECAUSE OF THAT. JUST READ THE WAY YOU NORMALLY DO.'
4. Begin the oral reading with Paragraph One. For each paragraph do the following:
  - a. RESET THE STOPWATCH TO ZERO.
  - b. Tell the student to begin; START THE STOPWATCH.
  - c. Record the student's mistakes as follows:
    - 1) Place an 'X' through all words that are miscalled and omitted and in the space where a word is inserted.
    - 2) If the child self corrects an error, place a 'C' over the 'X'.
    - 3) Provide correct pronunciation (1) after 5 seconds or (2) upon student request. Place an 'X' through the prompted word. Offer no other assistance.
  - d. When the paragraph has been completed stop the clock, record the time, and circle your judgment about fluency and inflection.
  - e. Let the student continue through consecutive paragraphs until his rate exceeds 60 seconds for a given paragraph.

REMEMBER: THE CRITERION FOR CONTINUING IS READING THE PARAGRAPH IN 60 SECONDS OR LESS.

Gray Oral Reading Test

G1

One morning a boy made a boat. "Where can I play with it?" he asked. Father said, "Come with me in the car. We will take your boat with us." Soon the boy called, "Please stop. I see water. May I play here?" "Yes," said Father. "Have a good time." Stopwatch time: \_\_\_\_\_ Inflection YES NO  
 Fluency YES NO

G2

One day five children went out to play in the beautiful white snow. They played for a long time and then began to make snow animals. One of the animals was a dog. Soon the dog next door came out of the house. When he saw the snow dog he said, "Bow-wow." The children laughed. "Now we have a dog that can bark." Stopwatch time: \_\_\_\_\_ Inflection YES NO  
 Fluency YES NO

G3

It was pet day at the fair. The children were waiting for the parade of animals to begin. They had trained their pets to do many different tricks. Among them was a tall boy whose goat made trouble for him. It kicked and tried hard to break away. When it heard the band, it became quiet. During the parade it danced so well that it won a prize. Stopwatch time: \_\_\_\_\_ Inflection YES NO  
 Fluency YES NO

Gray Oral Reading Test

G8

Airplane pilots have many important jobs. They fly passengers, freight, and mail from one city to another. Sometimes they make dangerous rescues in land and sea accidents, and drop food where people or herds are starving. They bring strange animals from dense jungles to our zoos. They also serve as traffic police and spot speeding cars on highways.  
Stopwatch time: \_\_\_\_\_ Inflection YES NO  
Fluency YES NO

G9

Hundreds of years ago, most of Europe was a very poor region. But China, a large country in eastern Asia, had many of the comforts of a rich, civilized nation. Only a few people from Europe had visited this distant region. One was the famous Marco Polo. He learned some of the languages that were spoken in China and served its great ruler for many years.  
Stopwatch time: \_\_\_\_\_ Inflection YES NO  
Fluency YES NO

G10

The eager spectators who had cheered the plucky Warriors through eight hard-fought innings were silent. Only a run was required to defeat the much feared champions, who had previously defeated all opponents. The spectators had earlier criticized the umpire severely. Now their faces were tense with excitement as the players took their positions.  
Stopwatch time: \_\_\_\_\_ Inflection YES NO  
Fluency YES NO

G8

The oil industry has been greatly increased by recent advances in science. Geologists have discovered new ways of locating veins of oil-producing rock. Problems of gusher control have been solved. Very effective also are newer methods of refining crude oil which have resulted in a higher ratio of quality fuel oil from a given volume of crude oil.  
Stopwatch time: \_\_\_\_\_ Inflection YES NO  
Fluency YES NO

G10

In response to the impulse of habit Joseph rose and spoke as in former days. He spoke vigorously, continuously, and persuasively while the others listened attentively but in grim and contemptuous silence. Finally exhausted, Joseph hesitated for a moment; as often happens in such circumstances he became confused and was unable to resume speaking.  
Stopwatch time: \_\_\_\_\_ Inflection YES NO  
Fluency YES NO

G12

Many of the hypotheses about physical phenomena formulated by early philosophers were inconsistent and in most cases could not be universally applied. In order to develop accurate principles very capable physicists, mathematicians, and statisticians had to cooperate wholeheartedly over long periods of time to verify numerous basic facts and assumptions.  
Stopwatch time: \_\_\_\_\_ Inflection YES NO  
Fluency YES NO

Silent Reading Measure

1. Please record the clock time. Time: \_\_\_\_\_
2. Turn to the Silent Reading Paragraphs.
3. Read the following instructions to the student:  
 "YOU ARE GOING TO BE READING SOME SELECTIONS SILENTLY ONE AT A TIME. I'LL BE ASKING YOU ABOUT EACH SELECTION AFTER YOU READ IT. I'LL TELL YOU WHEN TO START. PLEASE TELL ME WHEN YOU HAVE FINISHED READING."
4. For each selection do the following:
  - a. RESET THE STOPWATCH TO ZERO.
  - b. Tell the student to begin. Then, START THE STOPWATCH.
  - c. When the student has finished the selection, stop the stopwatch, record the time and cover the selection with the 8.5 x 11 opaque paper.
5. For each selection conduct the comprehension procedure as follows:
  - a. Say to the student, "TELL ME WHAT WAS IN THE SELECTION, STARTING AT THE BEGINNING." Number all memories in order of recall. Ignore unrelated responses.
  - b. The criterion for stopping is when the student remembers fewer than 40% of the memories. The number of recalls required to continue to the next paragraph are given with each selection.
  - c. Start the student at paragraph 3. If the student is stopped at paragraph 3, then try 2, etc. If the student is not stopped at paragraph 3, go on to 4, etc.

REMEMBER: THE CRITERION FOR CONTINUING IS WHEN RECALL REACHES OR EXCEEDS THE NUMBER OF MEMORIES GIVEN WITH EACH SELECTION.

Silent Reading Measure

1. 1: Criterion is: 6 memories. Time: \_\_\_\_\_ COVER SELECTION!
2. Tell me what the story was about, starting at the beginning.
  - A hen had
  - six yellow chicks.
  - One morning
  - she took them for a walk.
  - They looked for
  - something to eat.
  - They found some seeds
  - and sand.
  - A dog came
  - to play with them.
  - The hen
  - did not like the dog.
  - She flew at the dog
  - and made him run away.
1. 2: Criterion is: 8 memories. Time: \_\_\_\_\_ COVER SELECTION!
2. Tell me what the story was about, starting at the beginning.
  - Two children
  - got off the bus.
  - There was nobody
  - at the bus stop
  - to meet them.
  - So they sat down
  - to wait.
  - A few minutes later
  - an old blue car
  - came around the corner.
  - The children's mother
  - was in it.
  - She got out and
  - said she was late because
  - she couldn't get the car started
  - and she had to fix it.
  - They all
  - got into the car
  - and drove home.

Silent Reading Measure

1. 3: Criterion is: 10 memories. Time: \_\_\_\_\_ COVER SELECTION:

2. Tell me what the story was about, starting at the beginning.

- Last week
- a boy and girl from our school
- had a real adventure.
- They were going past the bank
- on their way home
- for lunch
- when two men ran out
- with a bag of money.
- The men had a car waiting for them
- and drove away
- very fast.
- When the police came,
- the children told them
- what color the car was
- and how big it was.
- They could even tell the police
- that one man was short and
- the other one was tall.
- Because the children were
- in the right place
- that day,
- the men were soon caught and
- the money was returned.

1. 4: Criterion is: 11 memories. Time: \_\_\_\_\_ COVER SELECTION:

2. Tell me what the story was about, starting at the beginning.

- Nearly two hundred
- years ago
- in France,
- the first man
- went up in a balloon.
- The balloon was made of
- paper
- covered with strips of cloth
- to make it strong.
- A huge basket
- was attached underneath
- to carry people,
- and a long rope
- anchored it
- to the ground.
- On this first trip,
- the man was in the air
- alone for several minutes.
- Later he took a friend
- up in the balloon with him.
- That time, they rose
- more than five hundred feet
- and stayed up
- for half an hour.
- They came down
- several miles
- from where they started.

1. 5: Criterion 1a: 12 sentences. Time: \_\_\_\_\_ COVER SELECTION!

2. Tell me what the story was about, starting at the beginning.

At one time, immense herds of buffalo  
 roamed the Great Central Plains  
 of North America.  
 Indian tribes  
 like the Blackfoot and the Cree  
 called themselves "People of the Buffalo"  
 and followed these huge animals,  
 killing them with bows and arrows  
 for the food and skins they needed.  
 They hunted on horseback  
 and moved their shelters  
 with the herds.  
 About one hundred years ago,  
 this source of food  
 was lost to the Plains Indians.  
 The buffalo began to be killed  
 in large numbers,  
 not just for needed food,  
 but for buffalo robes.  
 The robes brought such high prices  
 that some hunters pursued the animals  
 with rifles,  
 traveling by train  
 to where they grazed.  
 In a short time  
 the buffalo had all been killed,  
 and the Indians were left  
 without a basic source of food.

Silent Reading Measure

1. 5: Criterion 1a: 14 sentences. Time: \_\_\_\_\_ COVER SELECTION!

2. Tell me what the story was about, starting at the beginning.

At one time  
 exactly how or where ice hockey started.  
 However, field hockey was played  
 in England  
 more than one hundred fifty years ago,  
 and some pucks and sticks  
 have been found  
 that show  
 that ice hockey  
 was played  
 in Canada  
 by British soldiers  
 during the 1850's.  
 By 1890,  
 a hockey association had been formed  
 in Canada  
 to administer  
 and develop the game.  
 Shortly after, hockey was introduced  
 into the United States  
 at two universities  
 and the game was soon very popular.  
 At first  
 the game was played  
 only for fun,  
 but people were willing  
 to pay  
 to watch exciting games.  
 So professional teams were set up,  
 and the National Hockey Association formed.  
 That association later became  
 the National Hockey League (NHL).  
 By the end of the 1970's,  
 there were nearly twenty teams  
 playing in that league.

Silent Reading Measure

1. 7: Criterion is: 12 memories. Time: \_\_\_\_\_ COVER  
SELECTION!

2. Tell me what the story was about, starting at the beginning.

\_ Every four years  
 \_ athletes  
 \_ from all over the world  
 \_ compete  
 \_ in a festival of sports.  
 \_ These great contests  
 \_ are called the Olympic Games,  
 \_ since they were first conducted  
 \_ at Mount Olympus  
 \_ by the ancient Greeks.  
 \_ They were part of a religious celebration  
 \_ in honor of Zeus,  
 \_ father of the Greek gods.  
 \_ They were discontinued long ago  
 \_ and were revived  
 \_ only in 1896  
 \_ by men  
 \_ interested in continuing the custom.  
 \_ The first  
 \_ of the modern games  
 \_ were staged appropriately  
 \_ in Athens.  
 \_ Since that time  
 \_ they have been held  
 \_ in various countries.  
 \_ They stimulate world friendship  
 \_ and help to maintain interest  
 \_ in physical perfection.

1. 8: Criterion is: 13 memories. Time: \_\_\_\_\_ COVER  
SELECTION!

2. Tell me what the story was about, starting at the beginning.

\_ One of the most difficult  
 \_ political  
 \_ and economic  
 \_ problems  
 \_ of our Federal government  
 \_ is to prevent  
 \_ the development  
 \_ throughout the country,  
 \_ of certain commercial interests  
 \_ at the expense of others.  
 \_ One very persistent attack  
 \_ has been against  
 \_ the development  
 \_ of large corporations.  
 \_ DeWitt  
 \_ in his study of the history  
 \_ of this struggle  
 \_ states  
 \_ that it has three distinct objectives.  
 \_ First, to find some satisfactory means  
 \_ to control  
 \_ and regulate  
 \_ the activities of large business corporations;  
 \_ second, to resist  
 \_ the tendency  
 \_ of corporations  
 \_ to exploit  
 \_ natural resources  
 \_ for their own benefit;  
 \_ third, to control tariffs  
 \_ which favor trusts  
 \_ and monopolies.

Listening Comprehension Measure

1. Please record the clock time. Time: \_\_\_\_\_
2. Take the test booklet away from the student. You will be reading the Listening Comprehension Paragraphs to the student.
3. Read the following instructions to the student:  
 "YOU ARE GOING TO BE LISTENING TO SOME SELECTIONS. I'LL BE ASKING YOU ABOUT EACH SELECTION AFTER YOU'VE LISTENED TO IT."
4. Read at a moderate pace using normal inflection.
5. For each selection conduct the comprehension procedure as follows:
  - a. Say to the student, "TELL ME WHAT WAS IN THE SELECTION, STARTING AT THE BEGINNING." Number all memories in order of recall. Ignore unrelated responses.
  - b. The criterion for stopping is when the student remembers fewer than 40% of the memories. The number of recalls required to continue to the next paragraph are given with each selection.
  - c. Start the student at paragraph 3. If the student is stopped at paragraph 3, then try 2, etc. If the student is not stopped at paragraph 3, go on to 4, etc.

REMEMBER: THE CRITERION FOR CONTINUING IS WHEN RECALL REACHES OR EXCEEDS THE NUMBER OF MEMORIES GIVEN WITH EACH SELECTION. SPECIFIC NUMBERS ARE GIVEN WITH EACH SELECTION.

Listening Comprehension Measure

1. LC1: Criterion is 7 memories
2. Tell me what the story was about, starting at the beginning.
  - A boy
  - had a big gray cat.
  - He was going to give her
  - some milk.
  - The cat
  - did not come
  - when he called.
  - He saw her
  - up in a tree.
  - She was looking down
  - at a big dog.
  - The boy
  - sent the dog away.
  - Then the cat
  - jumped down.
  - She came
  - for some milk.
1. LC2: Criterion is 7 memories
2. Tell me what the story was about, starting at the beginning.
  - Jan woke up
  - and ran down
  - to breakfast.
  - It was her birthday.
  - She saw
  - a big basket
  - on her chair.
  - Something was moving
  - in the basket.
  - She took off the cover
  - and a little brown dog
  - jumped out.
  - The dog
  - started to bark
  - because it was glad
  - to get out.

Listening Comprehension Measure

## 1. LC3: Criterion is 8 memories

## 2. Tell me what the story was about, starting at the beginning.

- A boy
- was hurt
- on our street
- yesterday.
- He had been playing ball.
- He was riding
- his bicycle
- away from the ball field
- when a car
- came down the road.
- He did not see the car coming
- because he was looking back
- at the children
- who were still playing ball.
- The car was going slowly.
- It hit the boy
- but did not run over him.
- His arm was hurt
- and his bicycle was bent.

Listening Comprehension Measure

59

## 1. LC4: Criterion is 11 memories

## 2. Tell me what the story was about, starting at the beginning.

- The first railroad engines
- were pulled
- by horses
- along rails.
- Later
- steam engines were employed
- to pull trains,
- but these first engines
- could not travel very rapidly
- and often broke down.
- Once some people
- had a contest
- between a train
- drawn by a horse
- and a train
- powered by an engine.
- At first the horse was ahead
- because the engine started slowly.
- Then the engine
- passed the horse
- and stayed ahead for a while.
- However, before the end of the race,
- the engine broke down
- and the horse won.
- People who loved horses
- were pleased about the results
- of the contest.

Listening Comprehension Measure

60

## 1. LGS: Criterion is 14 sentences

## 2. Tell me what the story was about, starting at the beginning.

- Sometimes we have the idea
- from television
- that the only heroes
- in the "Wild West"
- were the cowboys
- and Indians.
- Really, the heroes of the West
- were the men and women
- who came from far away
- crossing the endless prairie
- in covered wagons
- and floating their belongings
- across rivers.
- Many settlers
- traveled hundreds of miles
- before they reached land
- that looked promising to them
- and they could build
- some kind of shelter.
- They could claim
- only as much land
- as they could work
- for a certain number of years.
- Many died
- of cold, hunger, and overwork,
- but others survived
- and opened the broad western plains.
- These people
- came with nothing
- but what they could carry,
- and a willingness to work.
- We should be grateful
- that they opened the West
- for us.

Listening Comprehension Measure

## 1. LGS: Criterion is 13 sentences

## 2. Tell me what the story was about, starting at the beginning.

- Baseball has often been called
- the national sport of the United States.
- It developed from games
- known in England
- as "rounders"
- and "town ball"
- and was played
- in U.S. colleges
- as early as 1825.
- Baseball's popularity
- has constantly increased
- because the rules are easily understood
- and the players require
- only simple equipment.
- War, as it happens,
- has been responsible
- for the growth of the pastime.
- Many men
- learned it first in camps
- during the American Civil War
- and started teams
- after they returned home.
- Both World Wars
- extended it further,
- for wherever U.S. soldiers were stationed
- in foreign countries,
- they created
- an interest in baseball
- that remained after they left.
- In Japan, for example,
- baseball may now be as popular
- as it is in the United States.

Listening Comprehension Measure

1. L07: Criterion is 14 ~~series~~.
2. Tell us what the story was about, starting at the beginning.
  - Failure to plan
  - for suitable defense
  - under irregular conditions
  - of warfare
  - accounted for defeat
  - in the first war
  - waged by the United States.
  - An army
  - of two thousand men
  - under General Arthur St. Clair
  - marched northward
  - from Cincinnati
  - to punish Indians
  - who had broken treaty provisions.
  - They neglected
  - to guard against
  - unexpected assault
  - and found themselves defenseless
  - when hostile Indians
  - suddenly attacked them
  - in the forest.
  - Firearms
  - gave little protection
  - against an enemy
  - in ambush.
  - After a futile attempt
  - at defense,
  - St. Clair ordered his men
  - to retreat.
  - Only fifty escaped
  - uninjured.
  - President Washington
  - felt very bitter
  - about St. Clair's carelessness
  - in the country's first military campaign.

Listening Comprehension Measure

1. L08: Criterion is 12 ~~series~~
2. Tell us what the story is about, starting at the beginning.
  - Railroad communication
  - developed rapidly
  - just after the civil war.
  - Between 1865 and 1873,
  - thirty-five thousand
  - miles of track were laid.
  - This doubled the distance
  - people could travel
  - by railroad.
  - Some of the new roads
  - connected important cities
  - and some extended westward beyond populated regions.
  - Congress
  - favored this sudden
  - development
  - by granting land to companies
  - interested in furthering
  - the expansion.
  - Grants included territory
  - lying within twenty miles
  - of the proposed roadbed.
  - Alternate sections
  - were allotted to the railroad.
  - Those in between were
  - reserved for homesteaders.
  - The sale of sections of land
  - owned by the railroad
  - was made easier
  - through this checkerboard
  - arrangement.

Listening Comprehension Measure

Test Administrator Debriefing Form

1. DO NOT DISMISS THE STUDENT YET.  
 Examine the entire test booklet to make sure that all tests are completed. Check them off.  
☐ Interview  
☐ Word Recognition (SORT)  
☐ Oral Reading (Gray)  
☐ Silent Reading (Durrell)  
☐ Listening Comprehension (Durrell)  
 If all are done, DISMISS the student.
2. PLEASE RECORD THE CLOCK TIME: Time: \_\_\_\_\_  
 Please answer the following questions concerning the just completed testing session.
3. What was the student's overall affect? (Check all that apply.)  
☐ Animated  
☐ Flat  
☐ Sullen  
☐ Hostile  
☐ Passive  
☐ Attentive  
☐ Fidgety  
☐ Nervous
4. What was the student's mean length of utterance? (Check all that apply.)  
☐ Multiple Sentences  
☐ Sentence  
☐ Phrase  
☐ One word
5. What was the student's general sophistication of language? (Check all that apply.)  
☐ High  
☐ Average  
☐ Low
6. What was the student's sex?  
☐ Male  
☐ Female
7. While reading silently and independently, what were the student's characteristics? (Check all that apply.)  
☐ Squirmed  
☐ Was attentive  
☐ Gave up  
☐ Asked for assistance  
☐ Subvocalized

Test Administrator Debriefing Form

- ☐ Tracked sentences with finger  
☐ Raced through material  
☐ Other. Specify: \_\_\_\_\_
8. Did the student appear to have any difficulty hearing?  
☐ No  
☐ Yes. Specify: \_\_\_\_\_
9. Did the student appear to have any difficulty with the visual aspects of reading?  
☐ Yes (Rubbing eyes, watery eyes, keeping text close to eyes)  
☐ No
10. Enter any other comments about the session that have not been recorded elsewhere.
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

Test Administrator Debriefing Form

BEST COPY AVAILABLE

Appendix B:

Interview 1

## Appendix B: Interview 1

Interview #1

Teacher \_\_\_\_\_

Date \_\_\_\_\_

Interview # \_\_\_\_\_

School \_\_\_\_\_

Grade \_\_\_\_\_

1. How is the reading program set up in your school (self contained, joplin, reading specialist, etc.)?
2. What time of the day do you schedule formal reading instruction?
3. How much time do you allocate for formal reading instruction each day?
4. What reading tests and associated materials do you use?
5. Is any portion of your reading program mandated? If so, please describe.
6. Do you operate under any other constraints which you feel affect your reading program?
7. Overall, what kind of year are you having in reading? (What leads you to feel that way?)
8. Describe the characteristics of the most common types of readers among your students. (This does not refer to your existing reading groups.)
  - a) Considering the types of readers you've just described, which type of student do you think you are most successful with?
  - b) Considering the types of readers you've described, which type of student do you think you are least successful with?
  - c) Which kinds of students require the most planning/preparation time?

## Appendix B: Interview 1

- d) Which kinds of students require the most instructional time?
  - e) How do you let your students know about the quality of their work in reading?
  - f) How do you try to motivate your students in reading?
  - g) How do you bring a student up to date in reading when s/he has missed:
    - 1) one or two days of school?
    - 2) more than a week of school?
  - h) In general, how would you rate the reading ability of your typical incoming students in September?
9. Describe the choreography of a typical reading session.
- a) How many reading groups do you have and what criteria do you use to form the groups?
  - b) How big is each group and what considerations determine its size?
  - c) About how many minutes a day do you typically schedule to spend with each group personally? (How close do you actually come?)
  - d) How do you reevaluate group membership?
  - e) Do you alter your instruction according to the group?
  - f) Do you alter your instruction according to the time of year?
  - g) Do you use your materials/resources differentially for each group? (How do you use them?)
  - h) What is your major goal in reading for each of your groups?

## Appendix B: Interview 1

10. How much of the textbook do you try to cover per week for each group?  
Per semester? Per year? (Additional materials beyond completion of text?)
11. Describe how you conduct a typical oral reading session for each group.  
(How do you deal with miscalls and inflection?)
12. How do you deal with acquisition of word recognition and analysis skills for each group?
13. How do you deal with acquisition of comprehension skills for each group?
14. How do you deal with acquisition of listening skills in general?

Appendix C:

Interview 2

## Appendix C: Interview 2

## Interview #2

Teacher \_\_\_\_\_

Date \_\_\_\_\_

Interviewer \_\_\_\_\_

School \_\_\_\_\_

Grade \_\_\_\_\_

1. When we last talked together you explained your instructional practices in a number of areas (give laminated card with categories listed on it):

Grouping (if any)

Feedback and motivation

Time allotted for the reading period

Time allotted for each of the groups

Materials used

Instructional practices in: oral reading, word recognition  
and analysis, reading comprehension and listening comprehension

Has anything changed since then in these areas?

Have there been any other changes that have affected your reading  
program apart from these areas?

(Take transcript of Interview One along. Prompt only if they say they can't  
remember what they said in Interview One.)

2. Overall, what kind of year have you had in reading?
3. You remember that you received information about how your students performed on the diagnostic battery for the pretest. Here are the charts we used. (Quickly go through each blank laminated chart and point out how each axis is labeled.) Each student was placed in a cell depending on how s/he did on the pretest. Later on, we sent you the pretest results expressed as average performance for your whole class as well as for each reading group (assuming you had groups). Please give me your thoughts about this pretest information. Free response. Prompt if following not covered in the response:

## Appendix C: Interview 2

Useful, how? / not useful, why?

Interesting?

Format preference?

Hard to understand?

What was missing?

4. Please give me your thoughts about the two sessions in which you diagnosed a simulated case of reading difficulty. Prompt if following not covered:

Useful? / not useful, why?

Interesting?

Did it influence the way you interpreted the pretest information?

After the posttesting is completed we will be sending you (at home) two sets of information. The first set will be formatted identically to that of the pretest (i.e., charts and class/group averages). The second set will show changes in performance from pretest to posttest. Would you be willing to let us arrange one last interview after you have had a chance to react to these results? You will of course receive a modest honorarium for your time.

Appendix D:

Interview 3

## Appendix D: Interview 3

INTERVIEW #3: SEPT-OCT. 1984

During this past summer you received posttest and achievement scores for last years' students in four reading diagnostic areas: word recognition, oral reading, silent reading comprehension and listening comprehension.

1. Did the results support your own observations and judgments about your students achievement? Explain.
2. Did the results contradict your observations/judgments in any way? Explain.
3. Did you use the information in any way when planning for this year?
4. What is your opinion of the usefulness of the posttest and achievement information you received?
5. Did diagnosing the simulated cases twice have any influence on how you interpreted or used the posttest/outcome scores? Explain.
- \*6. Did the two diagnostic training sessions have any influence on how you interpreted or used the posttest/outcome information? Explain.
7. Could we have provided you with anything else that you feel would have had an influence on your instructional decisions and actions?

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\* This question was asked only of those five teachers who received diagnostic training.